## A New Macrouroid Fish from the Japan Sea

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Absence of macrouroid fish was laid with much stress by GILBERT and HUBBS<sup>1)</sup> as an outstanding feature of fauna of the Japan Sea. But procurement of a specimen representing a new species, *Coelorhynchus multispinulosus*, in April, 1942 at Tsuiyama Market, Hyôgo-ken, situated on the coast of the Japan Sea makes their view no longer tenable.

I wish to return herewith my hearty thanks to Dr. A. Terao and Dr. K. Matsubara for their kind supervision during the course of my study.

## Coelorhynchus multispinulosus sp. nov.

New Japanese name: Yari-hige

First dorsal, II, 9; ventral, 7; pectoral 16; scales in series between lateral line and origin of second dorsal 6 (excluding those in lateral line).

Dorsal contour of snout slightly concave and nearly straight from middle of snout to dorsal fin; ventral contour feebly convex. Depth of body 1.83 in head; width of body over pectoral base 1.67 in depth.

Head compressed, its side vertical, width somewhat less than its greatest depth. Snout 2.29 in head, its form as seen from above being illustrated in text-figures. Suborbital ridge rather strong, continued to preopercular angle. Occipital ridges almost parallel, but diverging rather widely posteriorly; shortest distance between them 2.36 in interorbital. Ridge above nasal fossa and orbit continuous with postorbital ridge. Denticulate membranous margin of preopercle produced backward as a rounded lobe; margin of subopercle sharply projects posteriorly at lower angle. Orbit oblong, wider than high, about two-thirds the height, measuring 1.85 times in snout and 4.20 in head. Interorbital width equal to orbit. Mouth small, cleft extending to below middle of eye; maxillary 3.44 in head; teeth in villiform band, outer ones scarcely enlarged. Barbel rather short and slender, about 2.62 in orbit. Six branchiostegals; gill-membranes attached to isthmus.

<sup>1)</sup> GILBERT, C. H. and C. L. Hubbs, 1916: Report on the Japanese macrouroid fishes collected by the United States Fisheries steamer "Albatross" in 1906, with a synopsis of the genera. Proc. U. S. Nat. Mus., 51 (2149), p. 135.

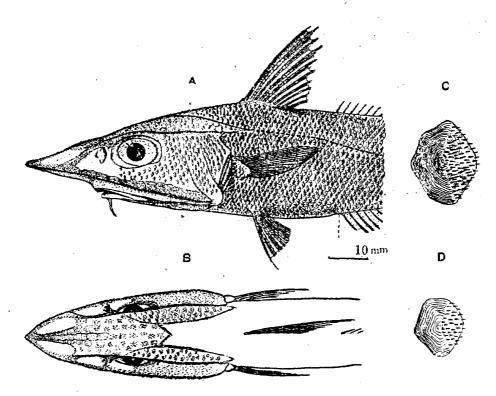


Fig. 1. Coelorhynchus multispinulosus sp. nov. A, Lateral aspect; B, dorsal aspect; C, Large scale on body side; D, Small scale on belly.

Pyloric caeca 12, slightly shorter than orbit.

Anus located just before anal fin; distance from insertion of ventral to center of anus 2.22 in head; distance from tip of lower jaw to ventral 1.44. No thoracic scaleless pit.

Scales armed with numerous small spinules (about 30-90) arranged in quincunx order as in *C. quincunciatus* Gilbert et Hubbs of East Indian species; scales before first dorsal and those on belly smaller than those on side of body. Head provided with scales on each ridge arranged mostly in one series but in two rows on infraorbital ridge behind middle of eye; these scales conspicuously spinulous except those on rostral ridge.

Anterior region of snout, nasal fossa, and the area between orbit and interorbital ridge naked; underside of head scaleless except anterior part of snout.

Interdorsal space slightly shorter than base of first dorsal, the former 2.00 in snout and the latter 1.84. First dorsal spine stout and very short; second dorsal spine entirely smooth, 2.11 in head; first dorsal fin reaches base of third ray of second dorsal when fin is depressed.

Origin of anal slightly behind the vertical from origin of second dorsal; first anal ray 1.81 in orbit. Pectoral 2.75 in head. Outermost ventral ray filamentous, but not reaching to anal.

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Color light purplish brown, darker above than below; side of head with silvery reflections; opercle with dark blotch; circumoral region to anus and gill membrane blackish; branchial and peritoneal cavities lined with blackish. First dorsal black; pectoral and ventral somewhat dark.

The foregoing description and figure are based upon a male specimen, measuring 185 mm in total length to broken tip of tail.

It is similar to *C. hubbsi* Matsubara<sup>2)</sup> in having 6 rows of scales arranged in a series from origin of second dorsal to lateral line and no scales on underside of head, but distinguished from it in having the following characters: interdorsal space long, about equal to base of first dorsal fin; scales with numerous small spinules arranged in quincunx order; anus located just before anal.fin; and no marking whatever.

# A New Cottoid Fish from the Inland Sea of Japan

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Two specimens representing a new species, Astrocottus matsubarae, were obtained at Kakogawa, Hyôgo-ken in March, 1937.

The author wishes to express his gratitude to Dr. A. Terao and Dr. K. Matsubara for their kindness extended to him in various ways.

### Astrocottus matsubarae sp. nov.

New Japanese name: Seto-kazika

D. IX, 12; A. 12; P. 17; V. I, 3; scales in lateral line 30.

Head 2.94 in body length measured to base of middle caudal ray: depth 3.84; width of head 3.57. Eye 4.25 in head; snout 4.05; maxillary 2.65; interorbital space 8.50; suborbital width 6.07; depth of caudal peduncle 5.16; postorbital part of head 1.77; longest dorsal spine (fourth one) 2.36; longest dorsal ray (fourth one) 2.24; longest anal ray (fifth one) 2.78; ventral 1.93; caudal 1.41.

<sup>2)</sup> Matsubara, K. 1936. On two new species of fishes found in Japan. Annot. Zool. Japan., 15 (3).